

3. Summary of the alternatives considered and if they are not proposed for adoption, why not. (Identify which, if any, of the alternatives is the preferred alternative.)

In the early planning phases of this project, the Ad Hoc Committee rejected Alternatives 1, 2, and 5 because they did not meet the Committee's goals. In addition, the three rejected alternatives had undesirable impacts on the community. The remaining four alternatives presented below were, therefore, carried forward from the recommendations of the 1998 Claude Allouez Bridge Location Study for additional study and evaluation (Claude Allouez Bridge Location Study (Appendix F).

As noted earlier in this document, the De Pere City Council had initially selected the two-bridge alternative (Alternative 3) as the preferred alternative. This decision may have been, for the most part, driven by the input of the local residents on the east side of the river. The residents were initially concerned with the impact of a four-lane bridge approach roadway through their neighborhood. Their direct input to the City Council, including signed petitions, resulted in the Council voting against both the Ad Hoc Planning Committee and City Public Works Committee's recommendation of a four-lane bridge (Alternative 4). The Council felt the two-bridge alternative and the proposed approach roadways would have the least impact on the immediate east side residential community. At the time, the business community was not totally supportive of the alternative, for fear that the proposed one-way approach roadways would have a detrimental impact on the economic viability of the east side central business district.

While this document does not actually identify a preferred alternative, the alternative ultimately selected is expected to meet two basic conditions. First, the project cannot close down the current crossing for any extended period of time. Secondly, the project must not significantly impact the downtown business environment. This second requirement calls for maintaining easy access to local business for potential customers. While the project should address traffic congestion issues, the safety and convenience of the public traveling in the Broadway corridor are paramount. While all four alternatives will be discussed in this document, the only two that appear to be viable, at this time, include the original Alternative 3 (multiple two-lane structures) and Alternative 4 (single four-lane structure located south of the dam).

No Build Alternative (Alternative 7)

The "No Build" alternative would involve the rehabilitation of the existing bridge. The rehabilitation effort would involve those repairs that are necessary to extend the life of the structure for an additional 20 years.

The rehabilitation effort would include the complete removal and replacement of the bridge deck system. Repairs to piers and trusses would be completed as necessary. The Bridge Rehabilitation Study completed in 2002 provides additional details on the proposed rehabilitation effort **Bridge Rehabilitation Study (Appendix B).**

While there has been support for this alternative, primarily from those stakeholders preferring not to change the bridge, the alternative does not have widespread support. From an engineering standpoint, the purpose and need for the project is not completely met. While the structure condition is improved, the traffic congestion and capacity of the structure and approaches remain a concern. In addition, this alternative would require a long-term closing of the crossing. This, as noted previously, will impact both public safety and business economics in the community. In effect, this is the alternative that was basically defeated in the April 2002 referendum.

As a result of those impacts and the public input received opposing this alternative, the four-lane bridge construction on the existing corridor is not considered a viable alternative and will not be carried forward in this document.

The Alternative 7 estimated project costs are as follows:

<u>Project Item</u>	<u>Estimated Cost</u>
Approach Roadways	\$ 0
Structure	\$4,600,000
Right-of-Way	\$ 0
<i>Total Estimated Alternative 7 Cost:</i>	<i>\$4,600,000</i>

Two One-Way Bridges (Alternative 3) (Exhibit 3)

The original Alternative 3 involves the construction of two similar bridges. Under this alternative, an eastbound bridge is proposed to be constructed south of the dam and would intersect Broadway in the vicinity of Charles Street. In addition, a westbound bridge would be constructed on the same alignment as the existing bridge. The construction of the westbound bridge would be delayed until the eastbound bridge was completed. The eastbound bridge would then carry two-way traffic until the westbound bridge was completed. This process would maintain a continuous operating river crossing.

In conjunction with the two one-way bridges, traffic movement will be modified on several local streets on the east side of the river. In the 1998 Bridge Location Study, the eastbound traffic was proposed to continue easterly up Charles Street to Michigan Avenue and then proceed in a northeasterly direction and meet George Street near the Huron Avenue intersection. Traffic movement on George Street would also be modified to one-way westbound between Huron Street and Broadway.

There were several concerns raised with this alternative. They included:

- Initial cost to construct and maintain two separate bridges.
- Aesthetic impact of two separate bridges on the vista of the river.
- Indirect impact of increased traffic passing through the east side residential area.
- Indirect impacts of having significant traffic passing in front of a Catholic Church and associated elementary school.
- Indirect impact of one-way traffic on the downtown business district.
- Direct impacts associated with the acquisition and relocation of a restaurant and seven residences in the Michigan/Superior Avenue corridor.

During the initial phases of the environmental documentation process, Alternative 3 was further evaluated and an alternative approach roadway was proposed. The revised Alternative 3 rerouted the eastbound traffic from the Broadway and Charles Street intersection to the north/northeast along the Wisconsin Street corridor to the George Street intersection. This roadway alternative is referred to as the Wisconsin Street crossover. While rerouting the traffic will mitigate the indirect impacts to the east side residential area, including the Catholic Church and elementary school, there will be several additional impacts, including:

- Acquisition and relocation of three businesses located on Charles Street, including a gas station, dental office, and jewelry store.
- Potential impacts to a worship center located west of the jewelry store on Charles Street. Actual extent of impacts will be dependent on final design alignments.
- Indirect impacts on multi-residential property and several businesses located along the Wisconsin Street crossover.

Therefore, Alternative 3 is proposed to include the revised approaches as shown on (Exhibit 3).

Alternative 3 is proposed to include two bridges with the same cross section on each: 8-foot sidewalk (one side), crash rail separation between pedestrians and vehicular traffic, 5-foot bicycle lane (one side), two 12-foot vehicle drive lanes, and 4-foot of shy distance to the parapet wall. Overall width of bridge, including railings and parapets, is anticipated to be 44.5 feet (Exhibit 4).

The Alternative 3 estimated project costs are as follows:

<u>Project Item</u>	<u>Estimated Cost</u>
Approach Roadways	\$ 2,930,000
Structure	\$12,390,000
Right-of-Way	\$ 1,460,000
<i>Total Estimated Alternative 3 Cost:</i>	<i>\$16,780,000</i>

Four-Lane Bridge, South of Dam (Alternative 4) (Exhibit 5)

The original Alternative 4 involved the construction of a single four-lane bridge. The bridge would be located south of the dam and would intersect Broadway in the vicinity of Charles Street. The existing bridge would be abandoned and removed.

In conjunction with the new bridge, traffic movement would be modified on several streets on the east side of the river. The eastbound traffic from the bridge would continue easterly up Charles Street to Michigan Avenue and then would proceed in a northeasterly direction and intersect George Street near the Huron Avenue intersection. The traffic on Charles Street would be two-way under this alternative. Traffic movement on George Street would be maintained as two-way traffic between Huron Street and Broadway.

There were several concerns raised by this alternative. They included:

- Indirect impacts of having increased, two-way traffic volumes pass through the Charles Street residential area.
- Direct impacts associated with the acquisition and relocation of a restaurant, gas station, dental office, and seven residences in the Michigan/Superior Avenue corridor.
- Direct impact on a municipal deep well located south of the restaurant.
- Direct impacts associated with the acquisition and relocation of a newspaper company and bowling alley on Broadway.
- Indirect impacts of having significant traffic passing in front of a Catholic Church and associated elementary school.

During the initial phases of the environmental documentation process, Alternative 4 was further evaluated and several additional modified sub-alternatives were proposed.

The sub-alternative that received the most support re-routed the traffic, similar to Alternative 3, from the Broadway and Charles Street intersection to the north/northeast along the Wisconsin Street corridor to the George Street intersection (Exhibit 5). The east approach to the bridge was moved further north, thereby, eliminating the potential impact on the municipal well facility. Two-way traffic on George Street, between Wisconsin Street and Broadway, would be maintained.

While this alternative approach roadway will mitigate the direct impacts on the Charles Street residential area, including the Catholic Church and the elementary school, there are several impacts remaining under this alternative, including:

- Direct impacts associated with the acquisition and relocation of three businesses located on Charles Street, including a gas station, dental office, and jewelry store.
- Potential impacts to a worship center located west of the jewelry store on Charles Street. Actual extent of impacts will be dependent on final design alignments.
- Additional right-of-way would be acquired on Wisconsin Street, between Charles Street and George Street.
- Additional right-of-way would be required along the east and west sides of Broadway for right turn lane additions. This would still require the acquisition and relocation of a bowling alley and a newspaper company, in addition to some strip taking south of the intersection along the east side of Broadway.

To eliminate the impacts on the buildings along Charles Street, an additional approach alternative was developed and evaluated (Exhibit 6). That alternative involved the re-configuration of the Charles Street and Broadway intersection from a four-leg to a T-intersection (three-leg). The Charles Street connection to Broadway would be closed. All the east-west traffic would remain on Broadway and George Street under this alternative. While this approach scenario would potentially reduce the direct impact on the four businesses located on Charles Street and thereby, reduce the cost of right of way acquisition; it has been rejected by the City of De Pere due to the resulting increased traffic congestion on Broadway between Charles Street and George Street. The local officials also felt that constructing a T-intersection would result in the feeling that the east end of the bridge is “dead-ended.” This was deemed not acceptable to the community.

Regardless of the approach scenario selected under the four-lane bridge alternative, the east approach to

the existing bridge would be abandoned from Broadway to Front Street. The vacated bridge right-of-way would be turned back to the City for its use. A number of potential uses have been identified for the vacant property, including parking area, open space, pedestrian mall or combination thereof.

Therefore, Alternative 4 is proposed to include the revised approaches as shown on [\(Exhibit 5\)](#).

Alternative 4 is proposed to include one bridge with the following cross section: 8-foot sidewalks (each side), crash rail separation between pedestrians and vehicular traffic (each side), 5-foot bicycle lanes (each side), four 12-foot vehicle travel lanes, and 6-foot median. Overall width of bridge, including railings and parapets, is anticipated to be 85 feet [\(Exhibit 4\)](#).

The Alternative 4 estimated project costs are as follows:

<u>Project Item</u>	<u>Estimated Cost</u>
Approach Roadways	\$ 3,650,000
Structure	\$ 9,469,000
Right-of-Way	\$ 2,100,000
<i>Total Estimated Alternative 4 Cost:</i>	<i>\$15,219,000</i>

Four-Lane Bridge, Existing Corridor (Alternative 6) [\(Exhibit 7\)](#)

This alternative involves the reconstruction of the bridge on the current alignment. In general, this alternative will result in a major disruption to the downtown business district. Significant additional right-of-way will be required along both Broadway and George Street. Numerous businesses will face relocation with this alternative. Many of the impacted businesses are located in identified Historical Districts.

This alternative would also require the closing of the river crossing for an extended period of time. In part, the message sent by the De Pere residents in the April 2002 referendum regarding closure of the bridge, makes this alternative very unpopular.

This alternative would result in many undesirable impacts on the community and therefore, has never been a legitimate alternative based on those impacts and the opportunity to implement other alternatives, which are less detrimental to the community. As a result of those impacts and the public input received opposing this alternative, the four-lane bridge construction on the existing corridor is not considered a viable alternative and will not be carried forward in this document.

The Alternative 6 estimated project costs are as follows:

<u>Project Item</u>	<u>Estimated Cost</u>
Approach Roadways	\$ 3,597,000
Structure	\$10,512,000
Right-of-Way	\$ 5,199,000
<i>Total Estimated Alternative 6 Cost:</i>	<i>\$19,308,000</i>

Other Alternatives

In addition to the above alternatives, there were a number of additional alternatives proposed by project stakeholders. Those alternatives were initially reviewed but not retained for detailed study. For the most part the additional alternatives would not meet the purpose and need for the project. They included:

- A two-lane bridge similar to the existing bridge and in the same location
- A two-lane bridge similar to the existing bridge but located adjacent to the existing bridge
- Replacing the existing bridge with a double decked bridge in the same location
- Replacing the existing bridge with a tunnel

The two lane alternatives were immediately eliminated because they did not meet the need to reduce the traffic congestion in the corridor, either now or in the future. The double deck bridge and tunnel were eliminated because of their cost and feasibility. The basic concerns related to the approach roadways associated with either of these alternatives.

Summary of Alternatives

The existing bridge is experiencing major deterioration. This deterioration will accelerate as time moves forward. The 1998 Claude Allouez Bridge Condition Report and the 2002 Bridge Rehabilitation Study recommend major structure rehabilitation, if the bridge is not replaced by 2006.

It is obvious that the "No Build" alternative (Alternative 7) and new four-lane bridge on existing alignment (Alternative 6) are not acceptable to the majority of project stakeholders who do not want downtime on the existing bridge. This leaves Alternatives 3 and 4 for further consideration. The selection of the preferred alternative basically comes down to one bridge or two. From a purpose and need standpoint, either alternative will be acceptable. While a single bridge is more cost effective and may be less costly to maintain, the costs of both alternatives are considered reasonable and acceptable.

One of several concerns raised by St. Norbert College, which is located along the west shore of the Fox River, south of the dam, is the proximity of any proposed structure to the campus. In the case of either of the remaining two alternatives, a bridge will be constructed in a closer proximity to the campus than the existing bridge. Based on noise measurements and modeling of the proposed structures, significant increases in noise impacting the campus are not anticipated with either alternative **(Traffic Noise Study – February 5, 2003)(Appendix H)**.

While noise is a concern to the college, just as important is the overall quality of life on the campus, whether real or perceived. The campus has a beautiful vista of the Fox River. The leadership at the college is concerned with any bridge alternative that may compromise this asset. To partially mitigate this concern, the De Pere City Council took action to support a curved bridge alignment to maximize the distance from the bridge to the campus **(Exhibit 8)**. This action was supported by the college to the point of agreeing to reimburse the city for the additional cost of a curved bridge over a straight bridge. The estimated cost to the college, based on the local cost share, is between \$100,000 and \$130,000. The City has also been working with the college to develop a bridge, which is aesthetically pleasing and will fit into the surrounding campus environment. Discussions and planning will continue on the architectural treatments that may be used to mitigate the impact of a new structure on the river vista.

A final issue raised by the college is that increasing the capacity of the bridge, from two lanes to four lanes, will result in promoting or inviting additional traffic to use the bridge. The leadership of the college feels this will result in a freeway type facility, thereby, degrading the local campus environment. This is a particularly difficult concern to resolve, since a four-lane structure is required under the design guidelines of the Wisconsin Department of Transportation, based on current and future traffic volumes **(WisDOT Structure Design Guidelines)(Appendix I)**. It is anticipated that building a curved structure, in addition to enforcing a 25 mph speed limit on the bridge, will help mitigate this concern.

On a positive note, the new bridge(s) will incorporate both wider sidewalk sections and bicycle lanes. This will be an asset to the college, since many students shop and dine on the east side of the river. In addition, St. Norbert College maintains a football and track facility on the east side of the river, which is a frequent destination point for many of the college students.

On the surface, two bridges appear to be more reliable, especially when routine maintenance actions are undertaken. It is anticipated that neither alternative would require future bridge closures for routine maintenance. A second reliability concern relates to the potential for a future catastrophic failure of either alternative. The most probable failure may be due to boat traffic colliding with bridge piers. The potential for this event primarily exists south (upstream) of the dam. The waterway is used primarily for recreational traffic and infrequent small barge traffic and therefore, the probability of a major collision would be very low. This concern, does give a reliability advantage to the two-bridge option, since major boat collision is not anticipated due to the physical location of the piers for the bridge located north (downstream) of the dam. This area of the river is extremely shallow and is frequented primarily by local fisherman.

Therefore, this type of catastrophic event would not totally close the two-bridge crossing, since one bridge could remain in service while the other is being repaired.

The BCPC Land Use and Transportation Plan **Land Use and Transportation Plan**([Appendix E](#)) predicts a 36% increase in traffic volumes from 1995 to 2020. With projected traffic volumes of 30,000 vpd to 40,000 vpd or more, both Alternative 3 and 4 would be acceptable from a traffic capacity point of view.

Major traffic congestion on the west side results from both limited bridge capacity and the congestion at the George Street and Broadway intersection on the east side of the bridge. It is primarily experienced in the late afternoon and early evening. This traffic problem will be resolved with additional bridge lanes and an improved east side approach intersection.

The west approach will be similar for both alternatives. The only issue relating to the west approach is the final configuration of the Third Street and Reid Street intersections. There are a number of alternative configurations under consideration. The basic configurations have been narrowed to a signalized or non-signalized intersection ([Exhibit 9 – Figure 1 & Figure 2](#)). In both instances, two lanes of traffic will be maintained for eastbound traffic to the bridge. By maintaining two lanes of eastbound traffic, there will not be a capacity reduction through the intersection and onto the bridge. Traffic warrants have been met for a signalized intersection. A formal decision, as to which intersection alternative will be selected, has not yet been made. Impacts on the historic Nicolet High School property are anticipated with the non-signalized intersection. Some discussion has been held between the City of De Pere and St. Norbert College on closing Third Street south of the intersection, thereby, simplifying the traffic movement at the intersection. The closing of Third Street has been met with concerns from the local residents.

In addition to vehicular traffic, pedestrian traffic is also an issue at this intersection. Due to the traffic volumes and the roadway alignment, special effort will be made to safeguard pedestrian crossings. Pedestrian traffic issues are a driving force behind the selection of a controlled intersection.

It would appear, therefore, that the solution to the issues and concerns relating to the Broadway corridor on the east side of the bridge, will ultimately determine the final preferred bridge alternative. The basic issues and concerns on the east side relate to maintaining downtown character, customer access, and public safety.

During the preparation of this environmental document, there have been numerous meetings with the local officials. These meetings reviewed and discussed the various approach roadway configurations through the downtown. These discussions primarily focused on Broadway, between Lewis Street and James Street. As a result of those meetings, a number of design parameters were discussed and informally agreed to. They included:

1. The intersections and roadways shall be designed to provide a minimum Level of Service of “D.”
2. Two “unimpeded” drive lanes for straight through traffic shall be maintained in both the north and south directions on Broadway. The four lanes would match the existing STH 57 roadway section on both the north and south termini of this project. “Unimpeded” means that right turn and limited left turn movements would be permitted from these two lanes at traffic controlled intersections. It is assumed, that Level of Service “D” will be met in all instances.
3. A double left turn, coming from the south on Broadway onto the west-bound bridge approach, shall be required on both Alternative 3 and 4.
4. If right-of-way permits, a parking lane will be permitted along the east side of Broadway between Charles Street and James Street.
5. A dedicated left turn lane currently exists on the north and south approach at the James Street and Broadway intersection. This left turn can be eliminated to facilitate additional parking space as long as the intersection meets or exceeds the Level of Service “D” and public safety, at that intersection, is not compromised. If these conditions are not met, all parking shall be removed from Broadway, between George Street and Cass Street, and the left turn lanes shall be incorporated into the intersection.
6. Vehicular drive and turn lanes shall have a minimum width of 11 feet on the roadways and 12 feet on the bridges. Where room permits, 12-foot lanes shall also be utilized on roadway sections.
7. Parking lanes shall have a minimum width of 8 feet and a desired width of 10 feet.
8. Sidewalks shall have a minimum width of 8.5 feet and a desired width of 10.5 feet. Along

roadway segments where there are no anticipated lights, signs, planters, fire hydrants, or parking meters, sidewalk minimum widths can be reduced to 6.5 feet. Sidewalk widths indicated here include a 6-inch curb zone.

9. All roadways are assumed to be constructed of concrete with integral curb.

The two alternatives will be evaluated based on the above criteria. In each case, there are two main intersections on Broadway; one located at Charles Street and the other at George Street. In addition to evaluating intersection configurations, the alternatives will also be evaluated on their impacts on the Broadway corridor between Charles Street and James Street.

Prior to evaluating the two alternatives, a few comments need to be made regarding several other segments of the proposed project. Assuming that the Wisconsin Street crossover will be a part of both alternatives, the George Street (CTH G) and Wisconsin Street Intersection will be impacted by this project.

The basic traffic issue on the Wisconsin Street crossover is that eastbound traffic will be required to shift into the right lane in order to make a right turn eastbound onto George Street. The reason for this is because George Street eastbound has only a single drive lane. Some customer parking is allowed on the south side of George Street. It is anticipated that Brown County will be evaluating George Street and does expect to make roadway improvements from Wisconsin Street to Webster Avenue. This work is planned to take place at about the same time as this project. If the shifting of traffic on Wisconsin Street into the right lane becomes a congestion or safety issue, it is anticipated that parking will be removed from George Street, east of the Wisconsin Street intersection. This will then allow for a right turn movement for eastbound traffic from both lanes on Wisconsin Street at George Street.

The second segment of roadway that is proposed to be included in this project is the reconstruction of Broadway from James Street north to Cass Street. This is the only remaining section of roadway north of this proposed project that has not had a recent upgrade and is showing signs of deterioration. The roadway will be reconstructed to the current roadway section.

The following individual evaluations of each alternative will focus only on the Broadway corridor, because as previously discussed; it appears that the Broadway corridor issues will ultimately determine the final preferred bridge alternative.

Two One-Way Bridges (Alternative 3) Impact on the Broadway Corridor

The basic objective of this alternative is to split the east and westbound traffic in this corridor ([Exhibit 3](#)). The supporters of this alternative feel that traffic congestion will be alleviated by two crossings versus one. In addition, there is a feeling that two smaller bridges are less disruptive to the “small-town” atmosphere of De Pere than one larger bridge.

The separation of east and west traffic does somewhat reduce the footprint of the proposed intersections at Charles Street and George Street. This does occur only on the east and west approach to each intersection. The north and south approaches are proposed to be five lanes in width, four drive lanes and one turn lane. Due to the required queue lengths of each turn lane, the combined turn lanes will extend the total length between Charles Street and George Street. The Broadway roadway section between Charles Street and James Street, therefore, would be five lanes in width ([Exhibit 10](#)).

The only feasible parking lane in the Broadway corridor will be along the east side of the roadway north of George Street. The driving lanes will be a minimum of 11 feet in width. The parking lane will be 8 feet in width. The sidewalk width between Charles Street and George Street will be 11.5 feet. The sidewalk width between George Street and James Street will be 5.5 feet.

One significant concern with Alternative 3 is that the south approach to the George Street intersection does not allow for two straight through lanes and a double left turn lane configuration. The reason for this is that the width of the corridor at that point is restricted by several historic resources (South Broadway Historic District on the east side of the road and the Krause Building on the west side of the road) that would be directly impacted by any road widening at the south approach to the intersection. The result is that two dedicated left turn lanes, in addition to two straight through lanes in both directions are not feasible without impacting these resources. The Alternative 3 configuration is in conflict with the basic design parameters as agreed to and as noted earlier for this project. It should also be noted that this is

the same reason why Alternative 3 does not currently allow for a parking lane along the east side of the block from Charles Street to George Street. Any combination of straight through and left turn movements in a single lane will, based on analysis, result in a Level of Service "F" at the intersection. The combination of straight through and left turn movements in a single lane is not being considered.

Pedestrian crossings in the north-south directions at each intersection will be simplified due to the narrower roadway. Pedestrian crossings of Broadway will be similar to Alternative 4. Due to space limitations, not all legs of both major intersections have medians that can be used by pedestrians for safe refuge.

Four-Lane Bridge, South of Dam (Alternative 4) Impact on the Broadway Corridor

The basic objective of this alternative is to move the proposed bridge out of the immediate downtown area ([Exhibit 5](#)). This alternative will allow STH 32 traffic to move through the east side of the city without impacting the downtown businesses. In addition, the east-west traffic would be bypassed around the downtown area via the Wisconsin Street crossover.

In order to accomplish this, a larger but more efficient intersection would be constructed at Charles Street and Broadway. The intersection would have four approach legs. The eastbound approach, off the bridge, and northbound approach would be six lanes. Each of these approaches would have a double left turn lane configuration. The westbound approach would have five lanes, four drive lanes and a single left turn lane. The southbound approach would be comprised of four drive lanes and a dedicated right turn only lane onto the bridge. A left turn movement, onto the Wisconsin Street crossover, would not be permitted.

The size of this intersection is of concern to the local community for two reasons. First of all the intersection does not appear to be pedestrian friendly. Secondly, there is a concern that the intersection's footprint will adversely impact the "small-town" atmosphere of the east side. Too much concrete and too many lanes of traffic take away from the character of the downtown.

To mitigate these concerns, the southbound approach to the intersection will be designed to a 10-year traffic projection versus the typical 20-year projection. In affect, that will remove one lane on the northbound approach, thereby, reducing the intersection to 5 lanes on that leg. While the traffic lane will not be immediately constructed, right-of-way will be acquired under this project to meet the 20-year traffic projections. When the intersection no longer meets Level of Service "D," the City of De Pere has agreed to install the additional lane.

Pedestrian crossing is another concern with the wide intersection. It is anticipated that pedestrians walking in a north-south direction will normally cross the east approach at the intersection. This approach is five lanes with a median. Although pedestrians could cross on the west approach and find refuge in two medians there, they will be encouraged to use a pedestrian walkway provided under the bridge in front of the east abutment. The walkway will also be extended to the Fox River Trail, located adjacent to the river. The south and north approaches have five lanes with a median. All legs will have pedestrian actuated crossing signals.

The Broadway roadway section between Charles Street and James Street is proposed to be four driving lanes and a single parking lane along the east side of the road ([Exhibit 11](#)). The driving lanes will be a minimum 11 feet in width. The parking lane will be 10 feet in width. Depending on the specific roadway segment, the sidewalks will vary from 7.5 feet to 12 feet.

The George Street and Broadway intersection will be reduced from the current four-leg to a three-leg intersection. The intersection will be signalized with pedestrian actuated crossings. The final configuration will be somewhat dependent on what the City of De Pere does with the vacated right-of-way from the current structure.

There is one concern with the traffic movement on Broadway with this alternative. The concern relates to the George Street intersection. The intersection is currently proposed to be four lanes on both the north and south approaches. In both directions, the lanes have both a straight through and a shared turn movement. It is not expected to be a major concern for right turns. Left turn movements from the inside lanes may be more of a concern. Of the two, southbound traffic turning left to go eastbound on George

Street will be of most concern, since left turns at Charles Street will not be permitted. One mitigating condition is that James Street is one-way eastbound. Removing the left turn lane at this intersection, as has been proposed to accommodate parking, will not help in mitigating this problem.

Conclusions

While both alternatives have pro's and con's, it would appear as though Alternative 4 (single four lane bridge) may have the least impact on the Broadway corridor in the immediate downtown area. Since this alternative requires one less lane on Broadway from Charles Street to James Street, there is room for street parking over a longer segment of the downtown. In addition, the sidewalk widths allow for a more generous "planter/furniture" zone to house poles, hydrants, as well as other pedestrian amenities. While this alternative has the greatest direct impact on two businesses, the relocation of a newspaper company and bowling alley, it also appears to provide the greatest redevelopment opportunity for these parcels, as well as the vacated right-of-way for the existing bridge. In addition to the businesses, there will be direct impact on a single tenant/renter in the bowling alley building. Overall project cost and long-term maintenance costs are expected to be slightly lower for Alternative 4, as well. Impact on the river vista is less for a single bridge versus two bridges. While neither of the alternatives is complimentary to pedestrian movement, Alternative 4 appears to be slightly more conducive for pedestrians crossing Broadway.

As noted earlier, many of the issues relating to these two alternatives are a matter of individual preference. As a result, while Alternative 4 appears to have the least environmental and other impacts, a preferred alternative has yet to be selected.